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09/904,269	07/12/2001	Dennis L. Matthies	INTL-0571-US (P11416)	2029

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EXAMINER

DONG, DALEI

ART UNIT	PAPER NUMBER
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2875

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Paper No. 20040302

Application Number: 09/904,269
Filing Date: July 12, 2001
Appellant(s): MATTHIES, DENNIS L.

Timothy N. Trop
For Appellant

EXAMINER'S ANSWER

1. This is in response to the appeal brief filed January 26, 2004.

(1) Real Party in Interest

2. A statement identifying the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

3. A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) *Status of Claims*

4. The statement of the status of the claims contained in the brief is correct.

(4) *Status of Amendments After Final*

5. The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) *Summary of Invention*

6. The summary of invention contained in the brief is correct.

(6) *Issues*

7. The appellant's statement of the issues in the brief is correct.

(7) *Grouping of Claims*

8. Appellant's brief includes a statement that claims 1-20 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

(8) Claims Appealed

9. The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

6,458,005	Baker	10-2002
5,756,147	Wu	5-1998

(10) New Prior Art of Record

10. This Examiner's answer contains no new prior art.

(11) Grounds of Rejection

11. The following ground(s) of rejection are applicable to the appealed claims:

35 USC § 103

12. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,458,005 to Baker in view of U.S. Patent No. 5,756,147 to Wu.

Regarding to claims 1-20, Baker discloses in Figure 2, "at block 52 a tile 22 (*second sheet*) is secured to the tile chuck 24 by a vacuum and a cover plate 10 (*temporarily flattening a sheet*) is held in place by a vacuum on vacuum chuck 12. At block 53, the compliance is turned on (i.e., the pistons 48 are disengaged from the linear clutch 44) and the motor 30 is actuated to lower the tile chuck carrier 28. The tile 22 is brought into intimate contact with the cover plate 10, regardless of the tolerances on either the cover plate 10 or tiles 14 at block 54 (*secure flatten sheet to second sheet*)

while continuing to hold sheet in a flattened configuration). This alignment is the "zero" gap position. A sensor 31 may be used to detect when alignment has been achieved. In block 55, the compliance is turned off (i.e., the pistons 48 are pressed into the linear clutch 44), locking the chucks 24 in this position. Then, at block 56, the tile chuck carrier 28 is raised. This allows for the dispensing of a transparent adhesive, as described for example in co-pending application Ser. No. 09/082,287. At block 57, the chuck carrier 28 returns the chucks with tiles to the cover plate 10, and lowers them onto the cover plate 10. The chuck carrier 28 has the ability to accurately lower the tiles onto the cover plate 10. The tiles are lowered to a position that is 0.004" higher than the "zero" gap position with lead screw 38. Thus, the accuracy between the tiles 22 and cover plate 10 is achieved. FIG. 1 shows one such compliant chuck, however it is understood that several such chucks may be placed within chuck housing 16. For example, four chucks may be arranged in a four-square pattern for assembling four LCD tiles to form a larger display" (column 2, line 62 to column 3, line 19).

However, Baker does not disclose the processing of the sheet. Wu teaches in Figures 1 and 2, "the laminate 10 is built from the rear side on a substrate 12 (*sheet hold in a flattened configuration*). A rear electrode layer 14 is formed on the substrate 12. As shown in the Figures, for display applications, the rear electrode 14 consists of rows of conductive address lines (*row electrode*) centered on the substrate 12 and spaced from the substrate edges. A electric contact tab 16 protrudes from the electrode 14. A first, thick dielectric layer 18 is formed above the rear electrode 14, followed by a second, thinner dielectric layer 20 (*either dielectric layer can be the integrator plate*). A

phosphor layer 22 (*light emitting layer, also it is old and well known in the art to utilize an organic light emitting material for an electroluminescent device*) is formed above the second dielectric layer 20, followed by a front, transparent electrode layer 24. The front electrode layer 24 is shown in the Figures as solid, but in actuality, for display applications, it consists of columns of address lines (*column electrode*) arranged perpendicular to the address lines of the rear electrode 14. The laminate 10 is encapsulated with a transparent sealing layer 26 (*second sheet*) to prevent moisture penetration. An electric contact 28 is provided to the second electrode 24" (column 10, line 56 to column 11, line 5).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilize the vacuum chucks and method of Baker to manufacture the electroluminescent device of Wu in order to securely lock the flattened supports in place while minimizing warp and disturbance occurring in the supports, and furthermore accurately laminated and process the supports of the device.

(12) New Grounds of Rejection

13. This Examiner's answer contains no new grounds of rejection.

(13) Response to Argument

14. In response to Appellant's argument that Baker fails to teach or suggest to process the sheet in the temporary flattened configuration. Examiner asserts that it would be obvious to flatten the sheets or held the sheet in flat configuration during manufacturing

of the apparatus in order eliminate wrinkles and defects within the apparatus. Also, it is an inherent property that the sheet must be flattened or held in a flat configuration before being manufactured or before its being placed in the vacuum chuck.

Also, in response to Appellant's argument that Baker fails to teach or suggest to temporarily flatten the sheets. Examiner asserts that Baker teaches the use of the vacuum tile chuck, which places the sheets to be assembled in vacuum, and in order to achieve vacuum the sheet must be assembled and temporarily flattened. Albeit, the sheet maybe be stiff or thick, however, under vacuum chuck it has to be flatten to a degree and the degree of flatness of the sheet was not claimed by the Appellant, thus Examiner interprets any degree of flattening of the sheet as claimed flattening the sheets.

Further, in response to Applicant's argument that Baker reference teaches the away from the claimed invention that the sheet may be processed in the flattened configuration; Examiner asserts that Baker teaches the flattened of the sheet in the form of a vacuum tile chuck and process the sheets to form the display. Applicant merely claims the processing of the sheets and nowhere in the claims does the Appellant claim the processing of the sheet by adding components to the sheet. Thus, Examiner does not take adding component to the flatten sheet into consideration of the claimed invention.

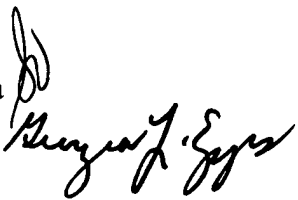
15. For the foregoing reasons, it is respectfully submitted that the rejections under 35 USC 103 are proper and should be sustained.

Art Unit: 2875

Respectfully submitted,

Dalei Dong
March 2, 2004

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